## PATENT ABSTRACTS OF JAPAN

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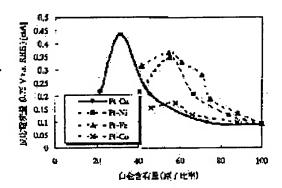
JINNAI AKINORI

# (54) CATHODE CATALYST FOR SOLID POLYMER FUEL CELL AND SOLID POLYMER FUEL CELL

(57) Abstract:

PROBLEM TO BE SOLVED: To provide a cathode catalyst for a solid polymer electrolyte fuel cell substantially reducing the amount of Pt used, and realizing remarkably high activity, and to provide a solid polymer fuel

SOLUTION: This cathode catalyst for the solid polymer fuel cell is formed by retaining a Pt-Cu base alloy on conductive carbon. The Pt-Cu base alloy contains 20-40% Pt in the ratio of the number of atoms as a composition ratio. The Pt-Cu base alloy is a Pt-Cu alloy having Pt:Cu=3:7 in the ratio of the number of atoms as the composition ratio. The Pt-Cu base alloy is retained on the conductive carbon by high frequency sputtering.



#### LEGAL STATUS

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### **EUROPEAN PATENT OFFICE**



#### **Patent Abstracts of Japan**

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APPLICANT: MITSUBISHI MATERIALS CORP;

INVENTOR: KINOSHITA MAKOTO;

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: C23C 14/34 C22C 21/00 H01L 29/40 H01L 29/43

TITLE

: SPUTTERING TARGET MATERIAL FOR FORMING THIN FILM OF THIN FILM

**TRANSISTOR** 

ABSTRACT: PURPOSE: To obtain a sputtering target material generating a small number of particles

and capable of forming a thin film less liable to cause unevenness in the alloying

component content with the lapse of time.

CONSTITUTION: This sputtering target material has a compsn. consisting of 1-20wt.% one or more kinds of alloying components selected from among Nb, V, Ti, Zr, Ni, Pt and W and the balance Al with inevitable impurities and a recrystallized structure contg. an intermetallic compd. of Al with the alloying components dispersed as particles of ≤30µm average particle diameter in the matrix of ≤30µm average grain diameter. This target material can suppress the generation of particles during film formation.

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